R E M A R K S

Reconsideration of this application is respectfully requested.

According to the present invention as recited in independent claim 5, a volume control apparatus of a radial piston pump or motor is provided for regulating a volume by positioning a cam ring of the radial piston pump or motor. As recited in claim 5, the volume control apparatus comprises: a servo piston which presses the cam ring so as to position the cam ring; an oil chamber corresponding to the servo piston, wherein the servo piston is driven in accordance with a driving pressure in the oil chamber; and a control valve which is built-in the servo piston, and which controls inflow and outflow of oil in the oil chamber, and which is positioned by applying a volume control pressure thereto. As recited in claim 5, moreover, the driving pressure in the oil chamber is changed by changing the position of the control valve by controlling the volume control pressure applied to the control valve.

According to the present invention as recited in independent claim 8, moreover, a positioning apparatus is provided which comprises: a servo piston which presses a member to be positioned; an oil chamber corresponding to the servo piston, wherein the servo piston is driven in accordance with a driving pressure in the oil chamber; and a control valve which is built-

in the servo piston, and which controls inflow and outflow of oil in the oil chamber, and which is positioned by applying a control pressure thereto. As recited in claim 8, the driving pressure in the oil chamber is changed by changing the position of the control valve by controlling the control pressure applied to the control valve.

Claims 5 and 7-9 have been rejected under 35 USC 102 as being anticipated by USP 4,077,745 (newly cited "Rometsch et al"), and claims 5 and 7 have been rejected under 35 USC 102 as being anticipated by USP 4,652,215 (previously cited "Kuroyanagi et al"). These rejections, however, are respectfully traversed.

With respect to newly cited Rometsch et al, the Examiner asserts that element 40 of Rometsch et al corresponds to the control valve recited in independent claim 5 and the control valve recited in independent claim 8. It is respectfully pointed out, however, that according to each of independent claims 5 and 8, the control valve, which is built-in the servo piston, controls inflow and outflow of oil in the oil chamber.

By contrast, according to Rometsch et al, although element 40 controls outflow of fluid from the chamber 34, element 40 of Rometsch et al does not control inflow of fluid into the chamber 34. See column 3, lines 53-65 of Rometsch et al. Accordingly, it is respectfully submitted that element 40 of Rometsch et al is not in fact a control valve which is built-in

the servo piston, and which controls inflow and outflow of oil in the oil chamber, and which is positioned by applying a (volume) control pressure thereto as recited in independent claims 5 and 8.

With respect to previously cited Kuroyanagi et al, the Examiner asserts that spring 64 and second control chamber 65 are a control valve which is built-in the servo piston as recited in claim 5. More specifically, the Examiner contends that the spring 64 and the second control chamber 65 are "disposed within" a servo piston (60) according to Kuroyanagi et al (item 6, lines 2-4 of the Office Action), and the Examiner asserts that the spring 64 and the second control chamber 65 "constitute a control valve" because according to the Examiner a "control valve" may be interpreted as a spring that permits a flow of fluid.

It is respectfully submitted, however, that the Examiner's interpretation of Kuroyanagi et al is inconsistent with the disclosure of Kuroyanagi et al and with the meaning of "control valve." In this connection, it is respectfully pointed out that Kuroyanagi et al clearly states that the spring 64 "is held between the second piston 60 and a cap 63," and that the second control chamber 65 "is defined by the second piston 60, the second cylinder 68 and the cap [63]" as shown in Fig. 3. (See column 4, lines 24-25 and lines 26-27.) It is respectfully submitted that since the spring 64 is held between the second piston 60 and the

cab 63 according to Kuroyanagi et al, the spring 64 is clearly not within the second piston 60 as asserted by the Examiner. In addition, since the second control chamber 65 of Kuroyanagi et al is defined on one side by the second piston 60, the second control chamber 65 of Kuroyanagi et al is clearly not within the second piston 60 as asserted by the Examiner. Accordingly, it is respectfully submitted that both the spring 64 and the control chamber 65 are external to the second piston 60 of Kuroyanagi et al. Therefore, it is respectfully submitted that even if the spring 64 and second control chamber 65 could be considered to be a "control valve" Kuroyanagi et al still would not disclose a control valve which is built-in the servo piston as recited in independent claims 5 and 8.

Still further, it is respectfully submitted that it is not logical to refer to spring 64 and control chamber 65 as a "valve" because the spring and control chamber permit a flow of fluid from element 66 "which is considered to be an oil chamber" as suggested by the Examiner (see page 4 of the Office Action). And it is respectfully submitted that this statement by the Examiner ignores the standard, plain meaning of the word "valve"[1]. And it

[1] valve: "any device for halting or controlling the flow of a liquid, gas, or other material through a passage, pipe, inlet, outlet, etc." See Dictionary.com. Unabridged (v 1.1). Random House, Inc., http://dictionary.reference.com/browse/valve (accessed: July 03, 2007). Copy submitted herewith.

is respectfully submitted that the spring 64 of Kuroyanagi et al does not become a "valve" merely because the spring 64 does not obstruct the flow of fluid. Indeed, according to claim 5, the driving pressure in the oil chamber is changed by changing the position of the control valve by controlling the volume control pressure applied to the control valve. And according to claim 8, the driving pressure in the oil chamber is changed by changing the position of the control valve by controlling the control pressure applied to the control valve.

It is respectfully submitted that even working together, the spring 64 and second control chamber 65 of Kuroyanagi et al do not correspond to a control valve which which is built-in the servo piston, and which controls inflow and outflow of oil in the oil chamber, and which is positioned by applying a (volume) control pressure, wherein the driving pressure in the oil chamber is changed by changing the position of the control valve by controlling the (volume) control pressure applied to the control valve.

It is respectfully pointed out, moreover, that the Examiner's interpretation of Kuroyanagi et al in item 6 on page 4 of the Office Action conflicts with the Examiner's interpretation of Kuroyanagi et al in item 3 on pages 2 and 3 of the Office Action. More specifically, in item 6 of the Office Action, the Examiner considers element 66 (a "connecting port") of Kuroyanagi

et al to be an oil chamber as recited in claims 5 and 8, while on the other hand in item 3 of the Office Action the Examiner considers element 17 (a “suction connecting path”) of Kuroyanagi et al to be an oil chamber as recited in claims 5 and 8. Thus, in interpreting the spring 64 and second control chamber 65 of Kuroyanagi et al as a “control valve” in item 6 of the Office Action, the Examiner uses a different interpretation of Kuroyanagi et al than is set forth in item 3 of the Office Action. Nevertheless, it is respectfully submitted that neither path 17 nor port 66 reasonably corresponds to the oil chamber recited in claims 5 and 8.

It is respectfully requested, moreover, that the Examiner clarify why the O-ring 30 of Kuroyanagi et al, which prevents leaks through cap 63 (or 53), is referred to throughout the Office Action as forming part of a servo piston together with servo piston 60 of Kuroyanagi et al.

In view of the foregoing, it is respectfully submitted that neither newly cited Rometsch et al nor previously cited Kuroyanagi et al discloses, teaches or suggests the structure of the present invention as recited in either independent claim 5 or independent claim 8. In particular, it is respectfully submitted that these references do not disclose, teach or suggest a control valve as according to the present invention as recited in each of independent claims 5 and 8.

In view of the foregoing, it is respectfully submitted that independent claims 5 and 8, and claims 6-7 and 9 respectively depending therefrom, clearly patentably distinguish over Rometsch et al and Kuroyanagi et al, taken singly or in combination, under 35 USC 102 as well as under 35 USC 103.

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Entry of this Amendment, allowance of the claims and the passing of this application to issue are respectfully solicited.

If the Examiner has any comments, questions, objections or recommendations, the Examiner is invited to telephone the undersigned at the telephone number given below for prompt action.

Respectfully submitted,

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